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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,118	04/17/2000	Feng Cheng	YOR9-2000-0041	1233
30743	7590	07/13/2004	EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			JAKETIC, BRYAN J	
			ART UNIT	PAPER NUMBER

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/551,118	Applicant(s) CHENG ET AL	
	Examiner Bryan Jaketic	Art Unit 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/29/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aykin in view of Brinkley et al. Aykin discloses a method of managing manufacturing logistics of end products comprising the steps of maintaining an inventory of components, built to stock; configuring-to-order the end products; and replenishing the components from suppliers following a base-stock policy (see col. 2, line 66 through col. 3, line 31 and col. 3, lines 53-64). Aykin teaches that the maintained inventory is determined to meet the desired order fill rate (col. 3, lines 33-40). Aykin further teaches that the order fill rate is based on forecasts of customer orders (see col. 2, lines 44-65), and is further based on the number of order types, and the use of each component in each order type (see col. 7, line 55 through col. 8, line 8). Therefore, it is inherent that if the inventory level of each component is optimized to meet the order fill rate, such that the forecasted customer need is met without an excessive surplus inventory, the inventory cost is therefore minimized.

Aykin does not teach that the components have different costs, nor does Aykin teach that the difference in costs determines the result of the replenishing step. Brinkley et al teach an inventory management strategy wherein the different costs of components determines the replenishment of that component (see, for example, Fig. 4;

col. 5, lines 27-41; col. 10, lines 25-37; and col. 13, lines 5-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Brinkley et al with the invention of Aykin to use the cost of the component to determine the replenishment level to optimize inventory costs.

Regarding claims 2 and 6, Aykin does not teach that the end products are personal computers. However, these differences are only found in the nonfunctional descriptive material and do not alter method of managing manufacturing logistics. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the method of Aykin for managing manufacturing logistics of computers because the type of end product does not patentably distinguish the claimed invention.

Regarding claims 3 and 7, Aykin does not disclose the use of a greedy algorithm to derive base-stock levels. However, greedy algorithms are common in the art, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a greedy algorithm as the most efficient means for deriving base-stock levels.

Regarding claims 4 and 8-15, Aykin discloses an algorithm comprising a set of components and a set of end products (col. 8, lines 1-16); the probability of no-stockout of a component and the probability of stockout of an end product (col. 4, lines 10-49);

outbound leadtime (col. 8, lines 1-16); and a safety factor (col. 8, lines 29-38). Aykin does not disclose the exact algorithm of claim 4. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to derive the algorithm of claim 4 from the equations of Aykin (columns 8 and 9) to fully describe the current inventory and needed inventory.

Response to Arguments

3. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

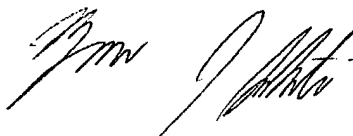
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crosswhite, Gawlick, and Kane each disclose inventory systems that calculate a unit cost for each component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Jaketic whose telephone number is (703) 308-0134. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (703)308-5183. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bj

A handwritten signature in cursive script, appearing to read "J. M. J. Miller".